

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A ~~M~~ethod of controlling a mode of reporting of measurements made on a radio interface between a mobile terminal and a cellular radio network infrastructure, the infrastructure comprising at least one radio network controller and fixed transceivers, the method comprising the following steps:
 - measuring parameters of radio propagation between the mobile terminal and at least one of the fixed transceivers;
 - transmitting to the radio network controller report messages indicating at least a part of the measured parameters, in accordance with a mode of reporting specified by the radio network controller;
 - obtaining an estimate of speed of movement of the mobile terminal at the radio network controller; and
 - processing the report messages at the radio network controller so as to determine, by taking account of the said estimate of speed, a mode of reporting to be specified for a part at least of the report messages.

2. (Currently Amended) A ~~M~~method according to claim 1, in which the speed estimate is calculated on the basis of the radio propagation parameters measured, and is included in a report message so as to be obtained at the radio network controller.

3. (Currently Amended) A ~~M~~method according to claim 1, in which the determination of the mode of reporting comprises the selection between a periodic transmission of the report messages and a transmission of the report messages upon event detection.

4. (Currently Amended) A ~~M~~method according to claim 3, in which the periodic transmission of the report messages is favoured with respect to the transmission of the report messages upon event detection when the estimate of the speed of movement of the mobile terminal is greater than a threshold.

5. (Currently Amended) A ~~M~~method according to claim 1, in which the determination of the report mode comprises, in the case of a periodic transmission of the report messages, the selection of the period of transmission of the said messages.

6. (Currently Amended) A ~~M~~method according to claim 5, in which the period of transmission selected is a decreasing function of the estimate of the speed of movement of the mobile terminal.

7. (Currently Amended) A ~~M~~method according to claim 1, in which the determination of the report mode comprises, in the case of a transmission of the report messages upon event detection, the selection of the event whose detection gives rise to the transmission of one of the said messages.

8. (Currently Amended) A ~~M~~method according to claim 7, in which the event selected has a probability of occurrence which is an increasing function of the estimate of the speed of movement of the mobile terminal.

9. (Currently Amended) A ~~M~~method according to claim 1, in which certain at least of the measured parameters indicated in the report messages for at least one fixed transceiver comprise data representative of a temporal variability of an energy level received over the channel between the mobile terminal and the said fixed transceiver.

10. (Currently Amended) A ~~M~~method according to claim 9, in which the processing of the report messages to determine the report mode takes account moreover of the said data representative of the temporal variability.

11. (Currently Amended) A ~~M~~method according to ~~each of claims claim 3 and 10~~, in which

certain at least of the measured parameters indicated in the report
messages for at least one fixed transceiver comprise data representative of a

temporal variability of an energy level received over the channel between the mobile terminal and the said fixed transceiver;

the processing of the report messages to determine the report mode takes account moreover of the said data representative of the temporal variability; and

the periodic transmission of the report messages is favoured with respect to the transmission of the report messages upon event detection when the temporal variability of the energy level is greater than a threshold.

12. (Currently Amended) ~~A~~ Method according to ~~each of claims claim 3 and 10~~, in which

certain at least of the measured parameters indicated in the report messages for at least one fixed transceiver comprise data representative of a temporal variability of an energy level received over the channel between the mobile terminal and the said fixed transceiver;

the processing of the report messages to determine the report mode takes account moreover of the said data representative of the temporal variability; and

the periodic transmission of the report messages is favoured with respect to the transmission of the report messages upon event detection when the temporal variability of the energy level is increasing.

13. (Currently Amended) ~~A~~ Method according to ~~each of claims claim 5 and 10~~, in which

certain at least of the measured parameters indicated in the report messages for at least one fixed transceiver comprise data representative of a temporal variability of an energy level received over the channel between the mobile terminal and the said fixed transceiver;

the processing of the report messages to determine the report mode takes account moreover of the said data representative of the temporal variability; and

the period of transmission selected is a decreasing function of the temporal variability of the energy level.

14. (Currently Amended) ~~A M~~A method according to ~~each of claims claim 7 and 10~~, in which

certain at least of the measured parameters indicated in the report messages for at least one fixed transceiver comprise data representative of a temporal variability of an energy level received over the channel between the mobile terminal and the said fixed transceiver;

the processing of the report messages to determine the report mode takes account moreover of the said data representative of the temporal variability; and

the event selected has a probability of occurrence which is an increasing function of the temporal variability of the energy level.

15. (Currently Amended) ~~A M~~A method according to claim 1, in which the measurement of the radio propagation parameters is at least in part performed in the mobile terminal,

the report message comprising upgoing messages sent by the mobile terminal to the infrastructure of the network.

16. (Currently Amended) A ~~M~~method according to claim 1, in which the measurement of the radio propagation parameters is at least in part performed in one of the fixed transceivers, the report messages comprising messages sent by the said fixed transceiver to the radio network controller.

17. (Currently Amended) A ~~M~~method according to claim 1, in which the processing of the report messages to determine the report mode takes account moreover of a service whose scope encompasses a communication between the mobile terminal and at least one of the said fixed transceivers.

18. (Currently Amended) A ~~R~~radio network controller for a cellular radio network infrastructure, comprising:

means for receiving report messages indicating radio propagation parameters measured between a mobile terminal and at least one fixed transceiver of the infrastructure, the report messages being transmitted in accordance with a mode of reporting specified by the radio network controller;

means for obtaining an estimate of speed of movement of the mobile terminal; and

means for processing the report messages so as to determine, by taking account of the said estimate of speed, a mode of reporting to be specified for a part at least of the report messages.

19. (Currently Amended) A ~~R~~radio network controller according to claim 18, in which the means for obtaining an estimate of speed of movement of the mobile terminal comprise means for calculating said speed estimate on the basis of the radio propagation parameters measured, and means for receiving a report message including said speed estimate.

20. (Currently Amended) A ~~R~~radio network controller according to claim 18, in which the means for processing the report messages so as to determine a mode of reporting comprise means for selecting between a periodic transmission of the report messages and a transmission of the report messages upon event detection.

21. (Currently Amended) A ~~R~~radio network controller according to claim 20, in which the means for selecting between a periodic transmission of the report messages and a transmission of the report messages upon event detection favour the periodic transmission of the report messages with respect to the transmission of the report messages upon event detection when the estimate of the speed of movement of the mobile terminal is greater than a threshold.

22. (Currently Amended) A Radio network controller according to claim 18, in which the means for processing the report messages so as to determine a mode of reporting comprise, in the case of a periodic transmission of the report messages, means for selecting the period of transmission of the said messages.

23. (Currently Amended) A Radio network controller according to claim 22, in which the period of transmission selected is a decreasing function of the estimate of the speed of movement of the mobile terminal.

24. (Currently Amended) A Radio network controller according to claim 18, in which the means for processing the report messages so as to determine a mode of reporting comprise, in the case of a transmission of the report messages upon event detection, means for selecting the event whose detection gives rise to the transmission of one of the said messages.

25. (Currently Amended) A Radio network controller according to claim 24, in which the event selected has a probability of occurrence which is an increasing function of the estimate of the speed of movement of the mobile terminal.

26. (Currently Amended) A Radio network controller according to claim 18, in which certain at least of the measured parameters indicated in the report messages for at least one fixed transceiver comprise data representative of a temporal variability of an energy

level received over the channel between the mobile terminal and the said fixed transceiver.

27. (Currently Amended) A Radio network controller according to claim 26, in which the means for processing the report messages to determine the report mode take account moreover of the said data representative of the temporal variability.

28. (Currently Amended) A Radio network controller according to ~~each of claims claim 20 and 27~~, in which

certain at least of the measured parameters indicated in the report messages for at least one fixed transceiver comprise data representative of a temporal variability of an energy level received over the channel between the mobile terminal and the said fixed transceiver;

the means for processing the report messages to determine the report mode take account moreover of the said data representative of the temporal variability;
and

the means for selecting between a periodic transmission of the report messages and a transmission of the report messages upon event detection favour the periodic transmission of the report messages with respect to the transmission of the report messages upon event detection when the temporal variability of the energy level is greater than a threshold.

29. (Currently Amended) ~~A~~ R radio network controller according to ~~each of claims claim~~
~~20 and 27~~, in which

certain at least of the measured parameters indicated in the report
messages for at least one fixed transceiver comprise data representative of a
temporal variability of an energy level received over the channel between the
mobile terminal and the said fixed transceiver;

the means for processing the report messages to determine the report mode
take account moreover of the said data representative of the temporal variability;
and

the means for selecting between a periodic transmission of the report
messages and a transmission of the report messages upon event detection favour
the periodic transmission of the report messages with respect to the transmission
of the report messages upon event detection when the temporal variability of the
energy level is increasing.

30. (Currently Amended) ~~A~~ R radio network controller according to ~~each of claims claim~~
~~22 and 27~~, in which

certain at least of the measured parameters indicated in the report
messages for at least one fixed transceiver comprise data representative of a
temporal variability of an energy level received over the channel between the
mobile terminal and the said fixed transceiver;

the means for processing the report messages to determine the report mode
take account moreover of the said data representative of the temporal variability;
and

the period of transmission selected is a decreasing function of the temporal
variability of the energy level.

31. (Currently Amended) A ~~R~~radio network controller according to ~~each of claims claim~~
~~24 and 27~~, in which

certain at least of the measured parameters indicated in the report
messages for at least one fixed transceiver comprise data representative of a
temporal variability of an energy level received over the channel between the
mobile terminal and the said fixed transceiver;

the means for processing the report messages to determine the report mode
take account moreover of the said data representative of the temporal variability;
and

the event selected has a probability of occurrence which is an increasing
function of the temporal variability of the energy level.

32. (Currently Amended) A ~~R~~radio network controller according to claim 18, in which
the measurement of the radio propagation parameters is at least in part performed in the
mobile terminal, the report message comprising upgoing messages sent by the mobile
terminal to the infrastructure of the network.

33. (Currently Amended) A ~~R~~ radio network controller according to claim 18, in which the measurement of the radio propagation parameters is at least in part performed in one of the fixed transceivers, the report messages comprising messages sent by the said fixed transceiver to the radio network controller.

34. (Currently Amended) A ~~R~~ radio network controller according to claim 18, in which the means for processing the report messages to determine the report mode take account moreover of a service whose scope encompasses a communication between the mobile terminal and at least one of the said fixed transceivers.